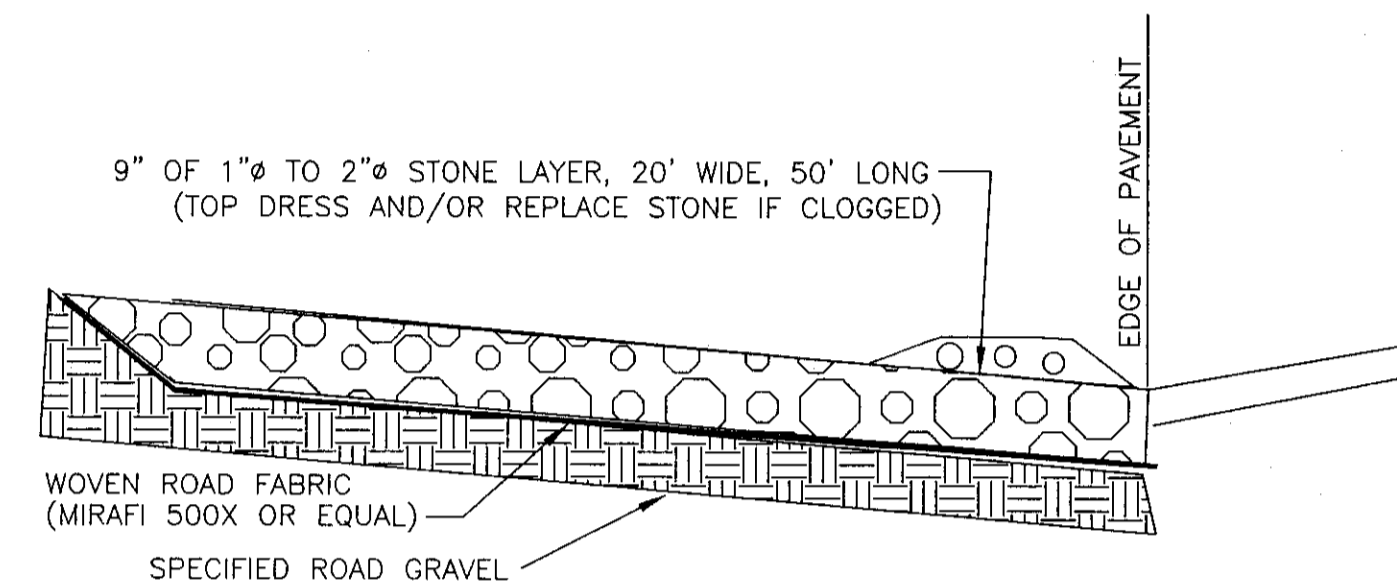


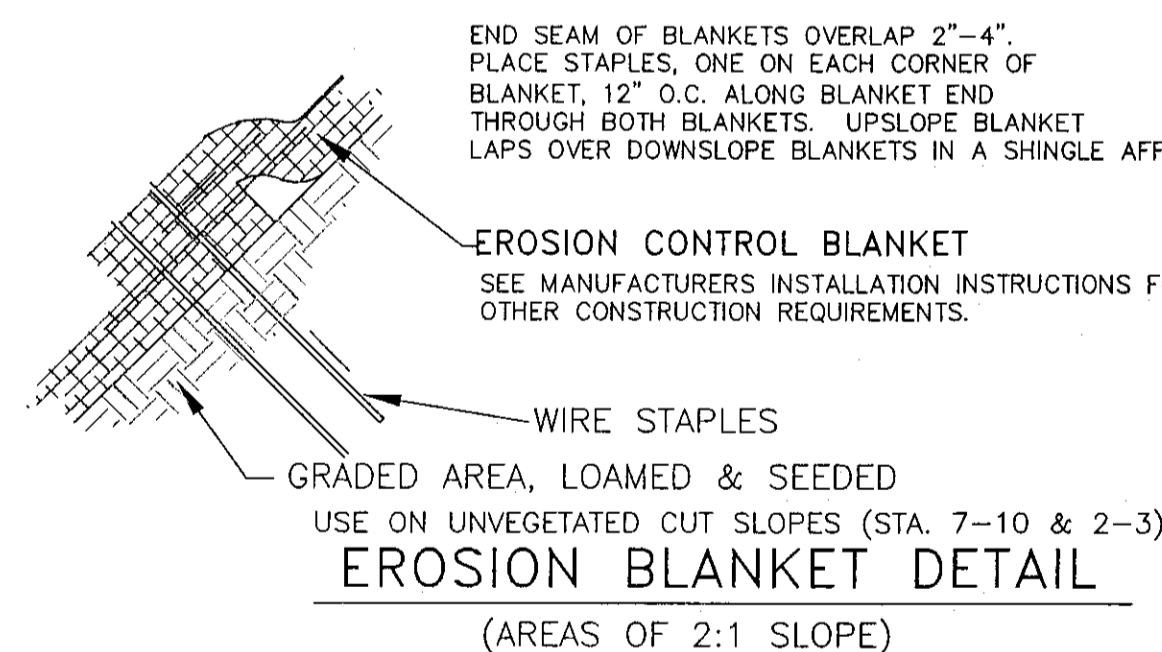
TREE PLANTING/ WITHOUT DRAINAGE

N.T.S.



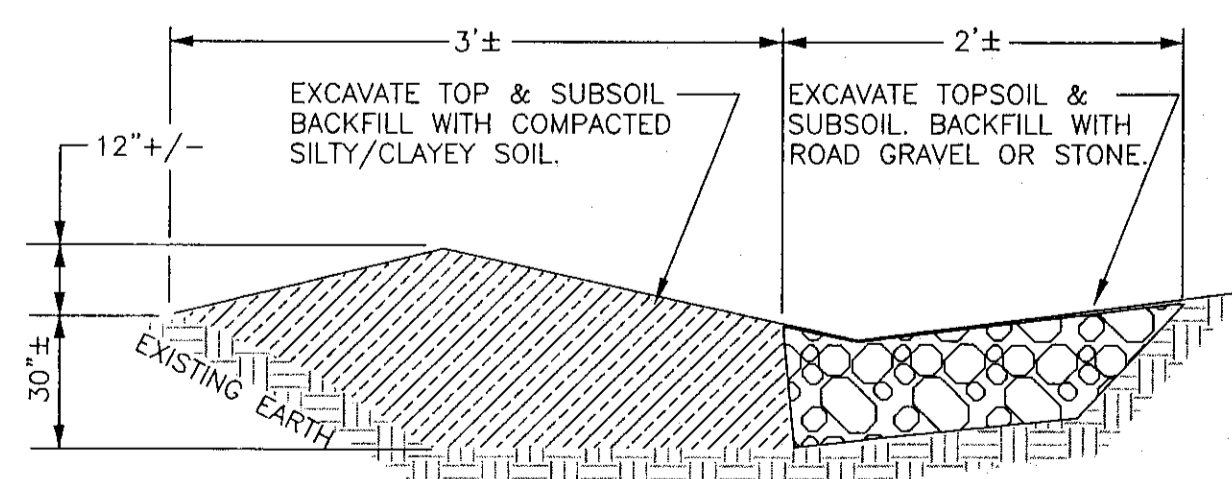
NOTE: IF STONE PAD DOES NOT ADEQUATELY PRECLUDE MUD TRACKING ONTO TOWN ROAD, HAND REMOVAL AND/OR WASHING AT APPROVED LOCATION SHALL BE PERFORMED.

CONSTRUCTION ENTRANCE DETAIL NTS



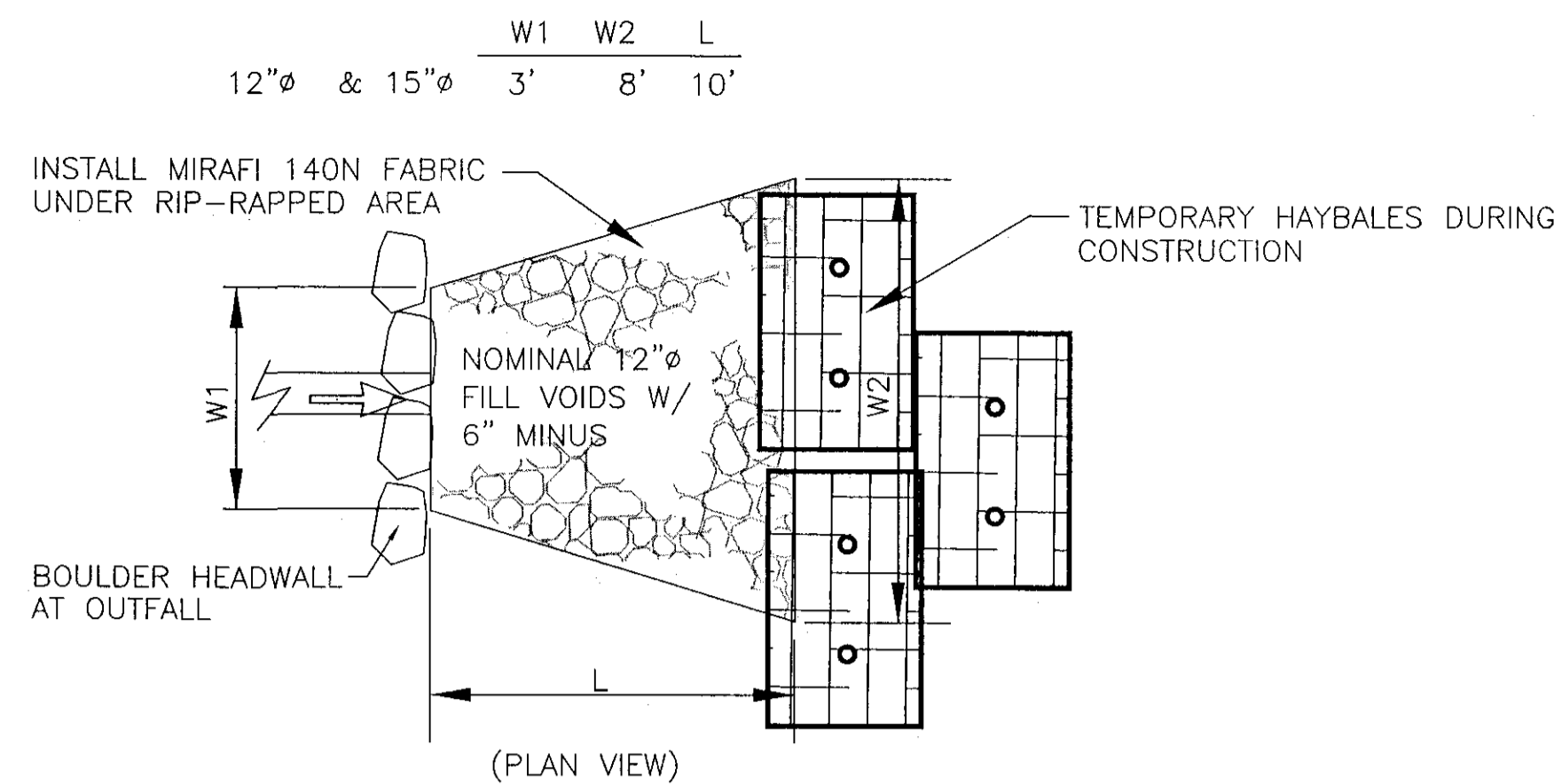
EROSION BLANKET DETAIL

(AREAS OF 2:1 SLOPE)

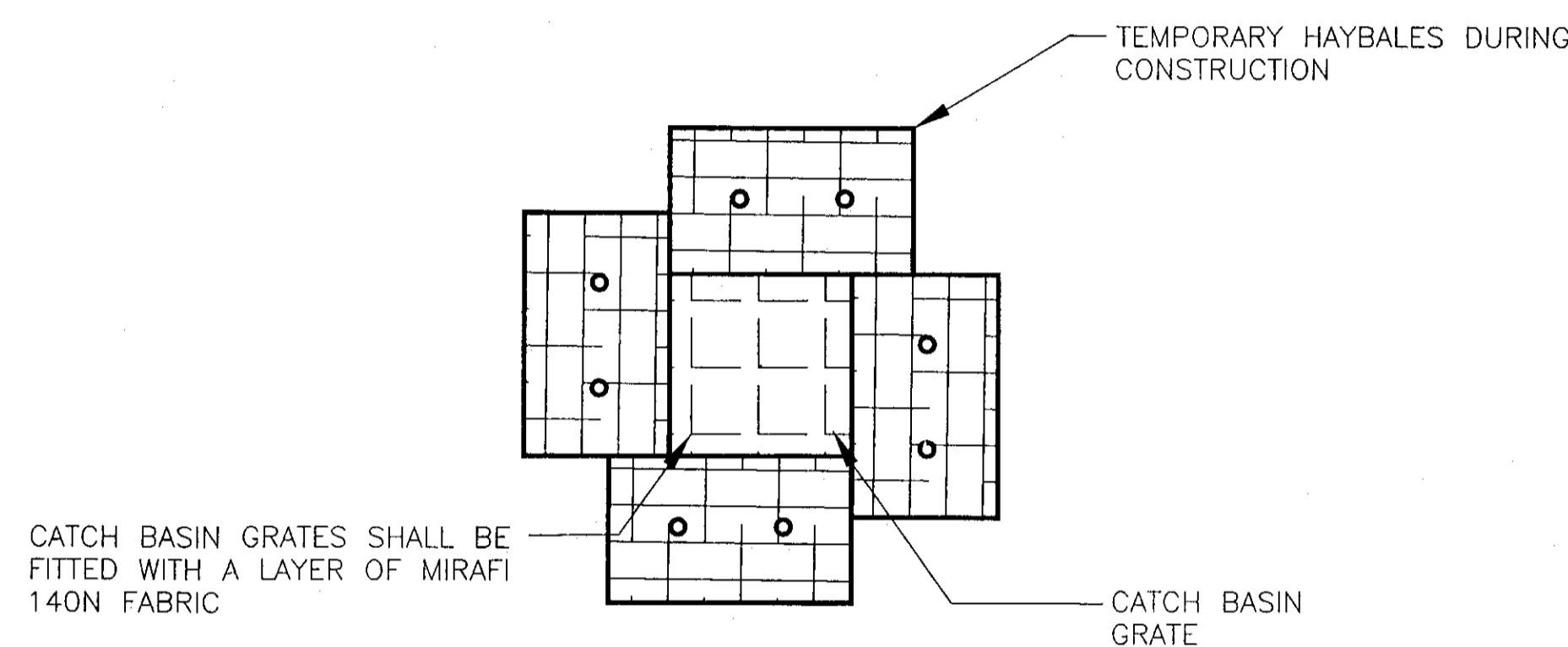


INSTALL WHERE DIVERSION OF OVERLAND RUNOFF IS DESIRED
NOTE: REMOVE WATER BAR FROM R.O.W. PRIOR TO PAVING

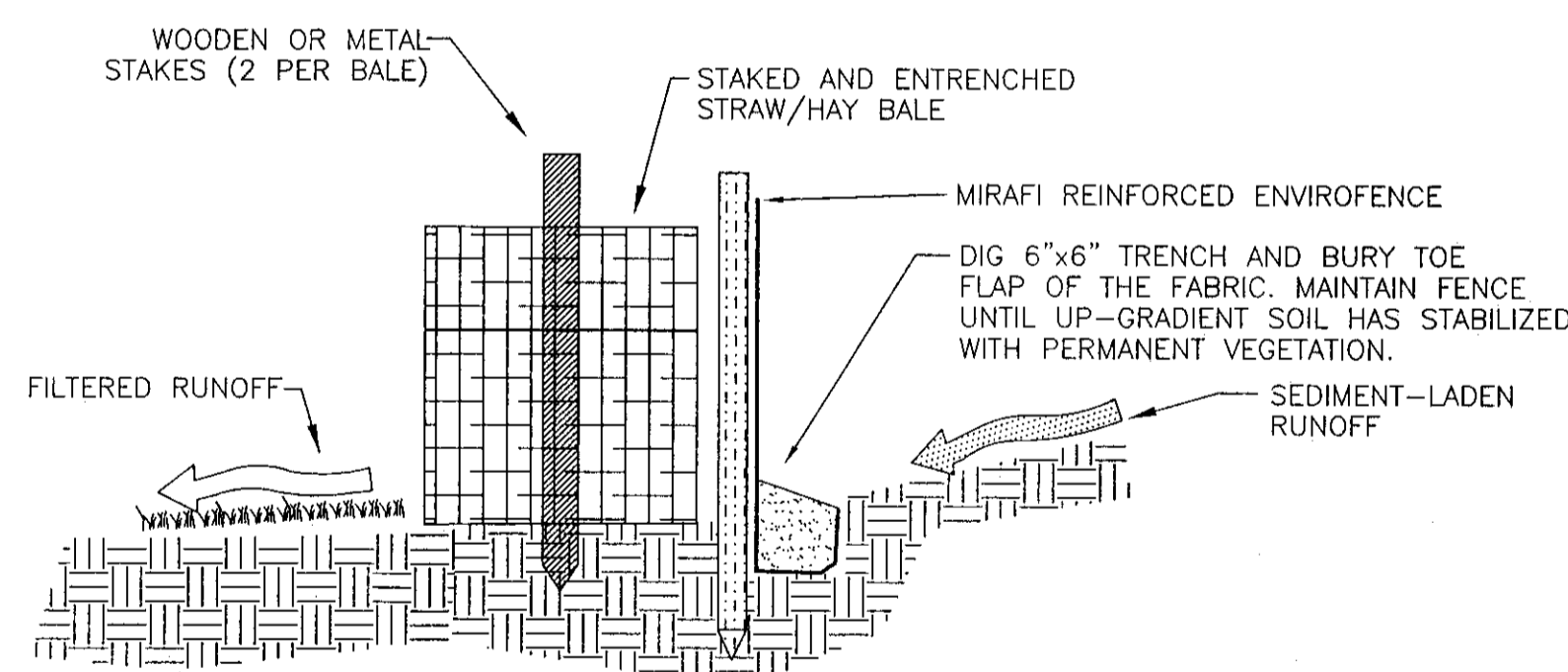
WATER-BAR DETAIL NTS



RIP-RAP APRON DETAIL NTS



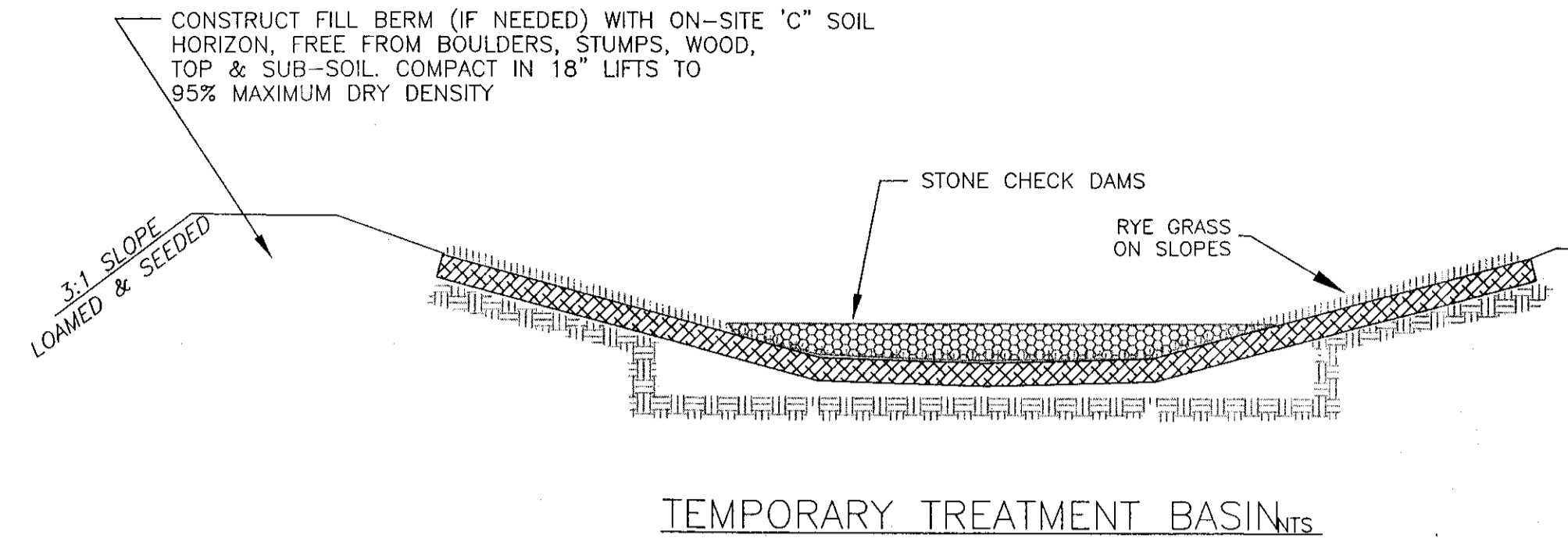
CATCH BASIN/HAYBALE DETAIL NTS



SILT FENCE W/ HAYBALE DETAIL NTS

INFILTRATION BED/BASIN CONSTRUCTION NOTES:

1. Infiltration beds/Bio-retention basins should never serve as temporary sediment traps for construction.
2. Before development site is graded, the area of the infiltration bed/basin should be roped off to prevent heavy equipment from compacting the underlying soils.
3. During and after excavation, all excavated materials should be placed downstream, away from the infiltration bed/basin, to prevent redeposition of these materials during runoff events. These materials should be properly handled and disposed of during and after construction.
4. Infiltration beds/basins should not be constructed until the entire contributing drainage area has been stabilized. Diversion berms should be placed around the perimeter of the infiltration bed/basin during all phases of construction. Sediment and erosion controls should be used to keep runoff and sediment away from the bed/basin area.
5. Light earth-moving equipment should be used to excavate the infiltration bed/basin. Use of heavy equipment causes compaction of the soils beneath the bed/basin floor and basin side slopes, resulting in reduced infiltration capacity. Since some compaction of soils will occur during construction, the bed/basin floor should be deeply filled with a rotary tiller or a disc harrow to restore infiltration rates, after final grading.
6. Prior to placing stone, pipes or erosion matting, the basin/bed shall be hard raked and all sediment removed.
7. If stormwater will be routed through pipes to a bed/basin prior to site stabilization, the bottom area shall be temporarily covered with MIRAFL 140N fabric during such use. Obtain engineer's approval before installing pipe/stone at beds or turf matting at swales and basins.



TEMPORARY TREATMENT BASINS

EROSION CONTROL NOTES

- 1) INSTALL THE EROSION CONTROL (SILT FENCING AS SHOWN ON PLANS), PRIOR TO ANY EXCAVATION/ALTERATIONS ON SITE.
- 2) CONSTRUCT COBBLE STONE STABILIZED ENTRANCE APRON PER DETAIL AT EACH PROJECT ENTRANCE.
- 3) THE CONSTRUCTION SEQUENCING SHALL BE AS FOLLOWS:
 1. INSTALL PERIMETER EROSION CONTROLS.
 2. CONSTRUCT TEMPORARY DETENTION BASINS.
 3. STABILIZE SLOPES IN THE TEMPORARY DETENTION BASINS. ALL ELEMENTS TO RECEIVE RUNOFF SHALL BE FIRST STABILIZED PRIOR TO DIRECTING WATER TO THEM. UTILIZE NORTH AMERICAN GREEN'S C350 EROSION CONTROL/TURF REINFORCEMENT MAT. USE LOAM SEED & MULCH IN BASINS IF IN GROWING SEASON.
 3. REMOVE TREES, STRIP, AND STOCKPILE SOILS. IF STOCK PILE IS LEFT FOR MORE THAN 21 CALENDAR DAYS, IT SHALL BE COVERED WITH A TEMPORARY VEGETATIVE COVER (RYEGRASS OR APPROVED EQUAL).
 4. CUT AND FILL ROADS AND SIDE SLOPES AND CONSTRUCT TEMPORARY WATER BARS.
 5. LOAM SIDE SLOPES & SEED/MULCH WITHIN 72 HOURS OF FINAL GRADE.
 6. INSTALL PERMANENT DRAINAGE STRUCTURES, SUB DRAINS, ETC.
- 5) SLOPE SEEDING SHALL BE SLOPE SEED TYPE-44 MIX. SEED APPLICATION SHALL CONTAIN STABILIZING STRAW MULCH. SEEDING DATES SHALL CONFORM WITH STANDARD SPRING OR FALL PLANTING SEASON. TEMPORARY SEEDING SHALL BE AN ANNUAL RYEGRASS (OR RYEGRASS BLEND) SUITABLE FOR THE LOCALE.
- 6) STAKED & ENTRENCHED HAY BALES SHALL BE PLACED AROUND CATCH BASINS AND DRAINAGE OUTFALLS. INSPECT AND REPAIR EROSION CONTROLS AND CONCENTRATED FLOW AREAS AT LEAST WEEKLY AND FOLLOWING EACH RAINFALL (1/2\"/>

Approval By
Town of Grafton
Zoning Board of Appeals

Date: 9/13/12

(Ref. Comprehensive Permit
WDRD Bk.46010 pgs.1-37)

STORMWATER SYSTEM OPERATION & MAINTENANCE:

- A) RESPONSIBILITY- THE APPLICANT SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER SYSTEM.
- B) INSPECTIONS- SYSTEM INSPECTIONS SHALL BE MADE WEEKLY DURING CONSTRUCTION, AND AFTER HEAVY RAINS (I.E. 1/2\")
- C) MAINTENANCE- CATCH BASIN SUMPS SHALL BE CLEANED ANNUALLY. NO MORE THAN 12\"/>

THE CONTRACTOR & OWNER ARE RESPONSIBLE FOR COMPLIANCE WITH THE CONSERVATION ORDER OF CONDITIONS AND THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED MANUAL/NARRATIVE. ALSO SEE SEPARATE INSPECTION AND OPERATION MANUAL.

REV: 8/11/12 FOR ZPA

GRAZ Engineering, LLC

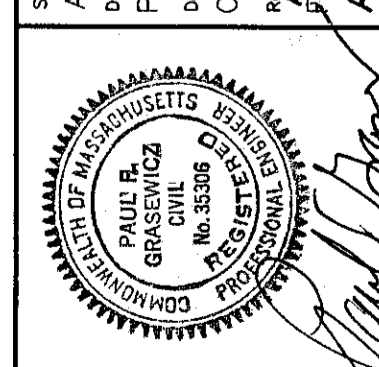
FITZ WILLIAM, NH 03447
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323 WEST LAKE ROAD,
TEL.: (603) 585-6959

PROVIDENCE ROAD COMMONS; 195 PROVIDENCE ROAD
40B SITE PLAN- EROSION CONTROL DETAILS

PREPARED FOR: PROVIDENCE ROAD COMMONS, LLC
43 CORTLAND WAY; GRAFTON, MASSACHUSETTS

Scale: AS NOTED
Drawn By: PFC
Date: OCTOBER 22, 2010
Check By: 29, 2012
Date: FEBRUARY 18, 2011
Approved By: APRIL 5, 2011



DRAWING SET
SHEET 11 OF 12